



# UNITED STATES PATENT AND TRADEMARK OFFICE

cel

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,602	07/01/2003	James L. Bailey	61501-0003	4808
9629	7590	03/16/2006	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			MASIH, KAREN	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,602

Applicant(s)

BAILEY ET AL.

Examiner

karen masih

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.


**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
Karen Masih  
Primary Examiner

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2837

Due to a mixup with reference figure 6 placed in the wrong patent reference, a new action is being sent out to clear things up.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1,3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labriola II in view of Mackay. Labriola II discloses system for controlling motor comprising module processor in communication with central processor and feedback circuitry in communication with module processor, see fig 1 #50, #56 and col 6 lines 4-65 and col 15 lines 4-10. Labriola II lacks disclosing central processor in communication with encoder. Mackay discloses encoder in communication with central processor, see fig 6 #56 and #52 as well as col 7 lines 5-10 and lines 50-60. It would have been obvious to one of ordinary skill in the art to combine the control system of Labriola II with the encoder with central processor of Mackay for improved control. With respect to claim 3 it is disclosed in Labriola as #42.

3. Claims 2-8,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labriola II in view of Mackay as applied to claims 1,3 above, and further in view of Stanton et al, Giacomini et al and Miyanari and Grundmann et al. Labriola II and Mackay discloses control system as disclosed above, but lacks encoder that provides rotor and stator positional information, controls one or more coils of motor, feed back of temperature and coil condition (as best understood), H bridge circuits, and programmable gate array. Stanton et al discloses rotor and stator positional information col 5 lines 35-40. Miyanari discloses H bridge in fig 5 and controls one or more coils in

Art Unit: 2837

col 3 lines 1-10. Giacomini et al discloses temperature and coil conditions see claim 6 and #28 fig 1 . Grundmann et al discloses programmable gate array. It would have been obvious to one of ordinary skill in the art to combine the control system of Labirola II and Galecki et al with encoder with rotor and stator positional information of Stanton et al since that is typical of an encoder, and H bridge and controlling of coils of Miyanari and feedback of temperature and coil condition of Giacomini et al for improved control and programmable gate array of Grundmann et al since it is typical of integrated circuit.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stanton et al in view of Miyanari and Hlavinka et al .

Stanton et al discloses rotor position based on data received from encoder , col 5 lines 35-40. Stanton et al lacks disclosing determining how to energize coils , directing power module to provide current to appropriate coils , and monitoring rotor response . Miyanari discloses how to energize coils and direction module to provide current to appropriate coils , see col 2 lines 30-50 and col 3 lines 1-10 and col 4 lines 25 -40 . Hlavinka et al disclose monitoring rotor response ,see col 8 lines 35-45. It would have been obvious to one of ordinary skill in the art to combine rotor position received from encoder of Stanton et al with how to energize coils and providing current to appropriate coils of Miyanari

Art Unit: 2837

which is common in motor control and monitoring rotor response of Hlavinka et al for improved control .

6. With respect to applicant's arguments

7.

8. In response to applicant's argument that Labriola and Mackay is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, it is the subject matter that is being taught that are similar.

9. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, for improved control.


10. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

11. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to karen masih whose telephone number is 571-272-2068. The examiner can normally be reached on m-f 8.30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, david martin can be reached on 571-272-2800 ext 41. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
karen masih  
Primary Examiner  
Art Unit 2837